Client/Server

The New IT Environment

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Client/Server

The New IT Environment

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Client/Server—The New IT Environment

IJN • 1993

Notes:

Client/Server

The New IT Environment

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Peter Cunningham

President
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Topics

- Introduction
  - IT Revolutions
  - Client/Server Computing
- Client/Server User Implementation
- Vendor Strategies
- Conclusion

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Notes:

Introduction

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Revolutions

- Downsizing
- Outsourcing
- Re-engineering
- Networking

IS-94a

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IS Environment

"Old" Traditional	"New" Downsized
Mainframe	Client/server
Shared	Dedicated
Remote	Local
IS operated	User operated

ID-96

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Notes:

Client/Server Computing Description

- Server computer provides information, software and/or resources to client computers to enable applications processing

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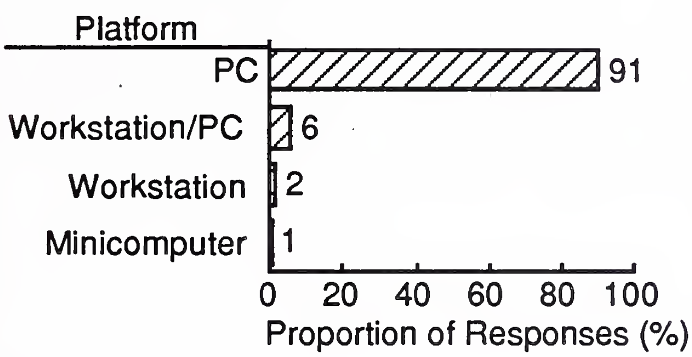
Distribution of Client Hardware Platforms



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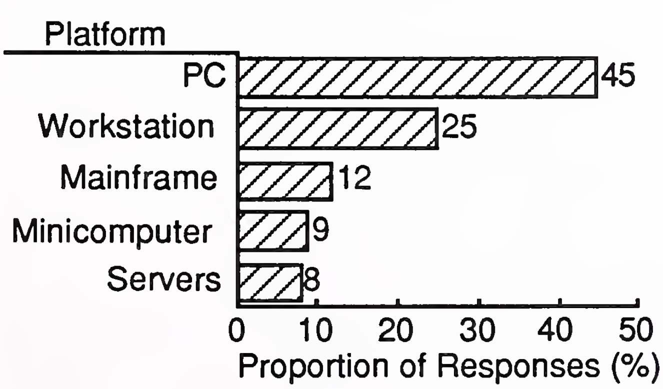
Distribution of Server Platforms



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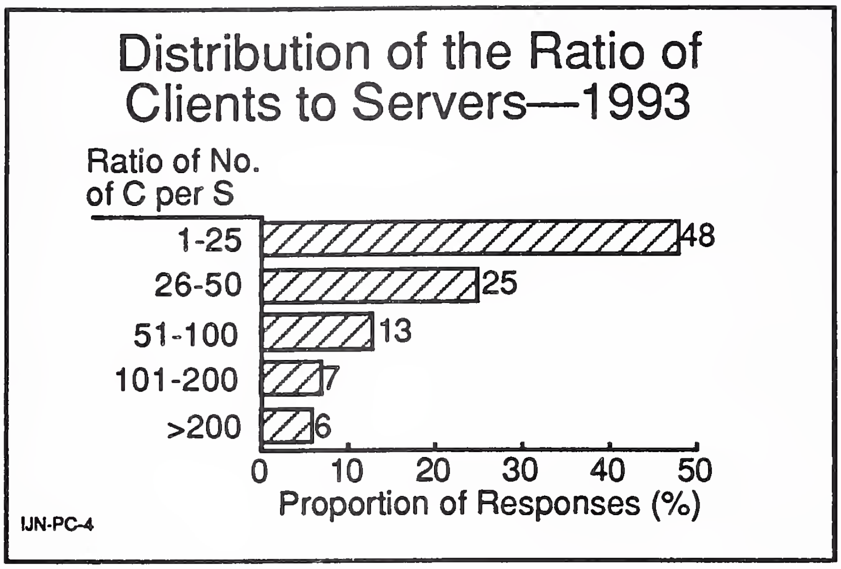
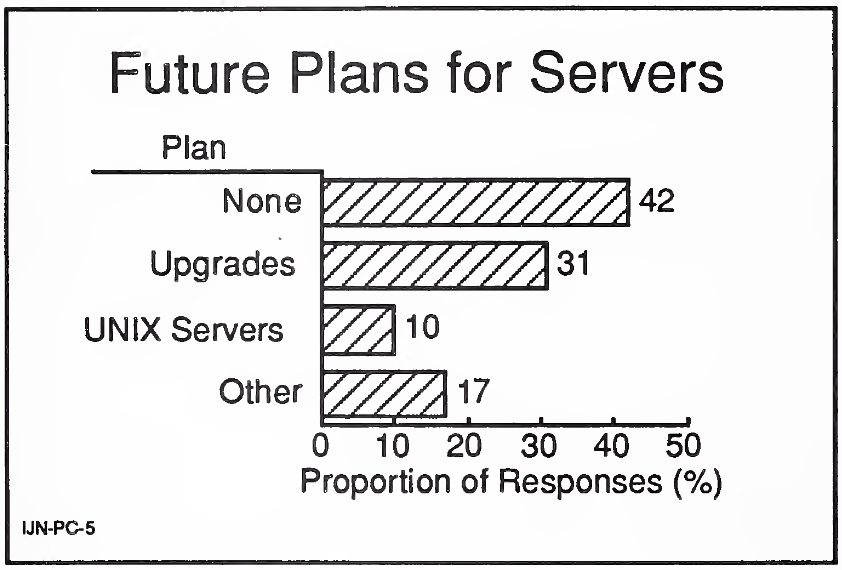
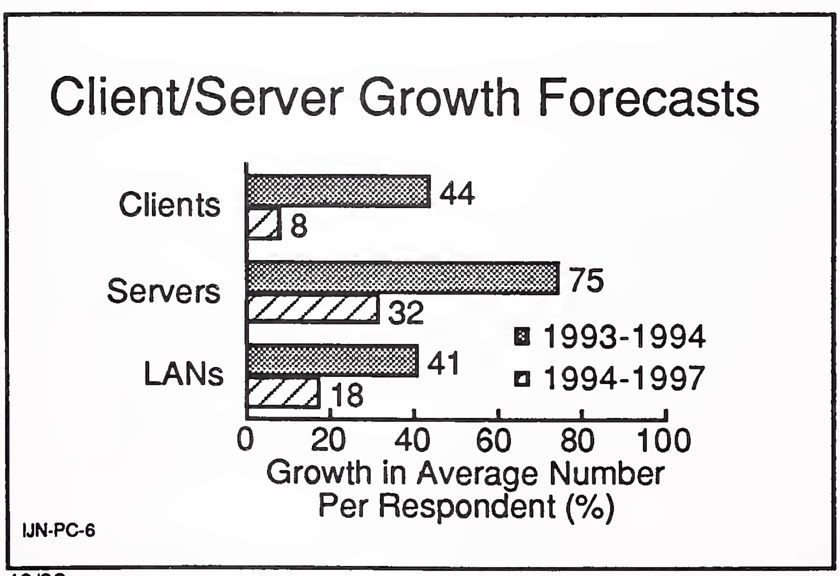
Notes:



Distribution of the Ratio of Clients to Servers—1993
Ratio of No. of C per S
1-25
26-50
51-100
101-200
>200
48
25
13
7
6
0
10
20
30
40
50
Proportion of Responses (%)
IJN-PC-4



Future Plans for Servers
Plan
None
Upgrades
UNIX Servers
Other
42
31
10
17
0
10
20
30
40
50
Proportion of Responses (%)
IJN-PC-5



Client/Server Growth Forecasts
Clients
Servers
LANs
44
8
75
32
41
18
1993-1994
1994-1997
0
20
40
60
80
100
Growth in Average Number Per Respondent (%)
IJN-PC-6

Notes:

Client/Server Computing Description

- Concept involves
  - Sharing of responsibility; client and server necessary for applications result
  - 'Action' on the part of both client and server computers to achieve result

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Client/Server User Implementation

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Equipment Selection Reasons

Reason	Proportion of Mentions (%) Client	Server
In-Place	33	31
Price-Performance	25	22
Standards	18	11
Other	23	35

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Notes:

Distribution of Equipment Vendors

Vendor	Proportion of Mentions (%) Client	Server
IBM	20	$\boxed{30}$
"Intel"	$\boxed{32}$	11
Compaq	19	14
Other	28	47

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Conclusions—Equipment

- Servers are increasingly large PCs
- Already 'Legacy' C/S structures
- "Intel" is a leading C/S vendor
- Client market saturating
- Server market is open

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NT

- Needs
  - 486 or Pentium—minimum
  - 32 Megabytes of storage
  - 2 Gigabytes disk

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Notes:

NT

- Too big?
- Too slow?
- Too late?

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NT

- But...
  Provides OS for desktop RISC

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Distribution of Operating Systems

OS	Proportion of Mentions (%) Client	Server
DOS	$\boxed{73}$	$\boxed{38}$
UNIX	7	32
OS2	14	13
Other	7	17

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Notes:

Distribution of Network Operating Systems

OS	Proportion of Responses (%)
Netware	74
LAN Manager	8
LAN Server	7
TCP	6
Other	10

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Operating Systems Selection Reasons

	Proportion of Mentions (%)		
Reason	COS	SOS	NOS
In-Place	27	12	25
Capabilities	11	21	14
Standards	18	5	16

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Operating Systems Selection Reasons

	Proportion of Mentions (%)		
Reason	COS	SOS	NOS
Compatibility	6	14	17
Other	38	48	28

MC3-PAC-10b

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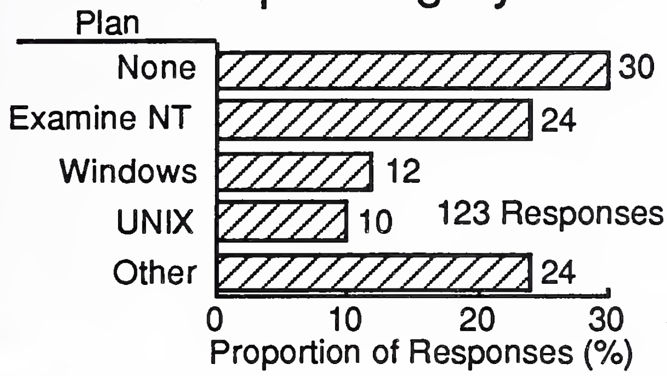
Notes:

Future Plans—C/S and Network Operating Systems



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Conclusions Operating Systems

- Dislocation between client and server OS
  - Clients, DOS is 'there'
  - Servers, selection is open
- Novell dominates NOS—No change expected
- NT is not penetrating rapidly

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DBMS

- Hierarchy growing
  - Non-programmable: Q&A, Approach, etc.
  - Programmable: Access, FoxPro, PARADOX
  - "Heavyweight": Ingres, Informix, Oracle, Sybase
  - Large: ADABAS, DB2, IMS
  - New: Object-oriented—OOPS

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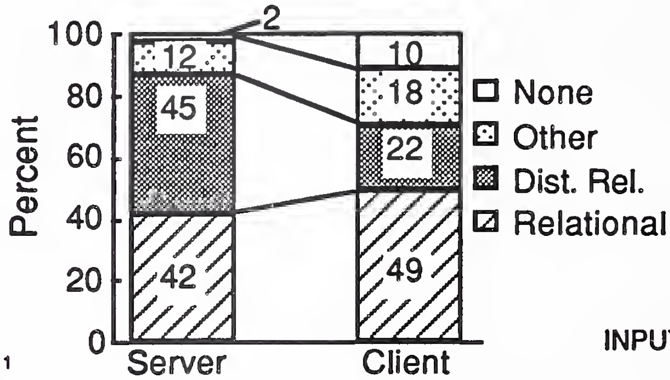
Notes:

Proportion of Data Base Types—Servers and Clients



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Case for Client/Server

- Microsoft tools
  - Object-oriented
  - Internal/external
  - Working with Intersolv and LBMS
  - Cross platform portability—Wings
  - Configuration management—Delta

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Distribution of DBMS Vendors

DBMS	Proportion of Mentions (%) Client	Server
Oracle	$\boxed{17}$	$\boxed{26}$
Sybase	7	18
FoxPro	14	8

MC3-PAC-13a

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Notes:

Distribution of DBMS Vendors

DBMS	Proportion of Mentions (%) Client	Server
DB2	5	9
Access	15	-
Other	43	38

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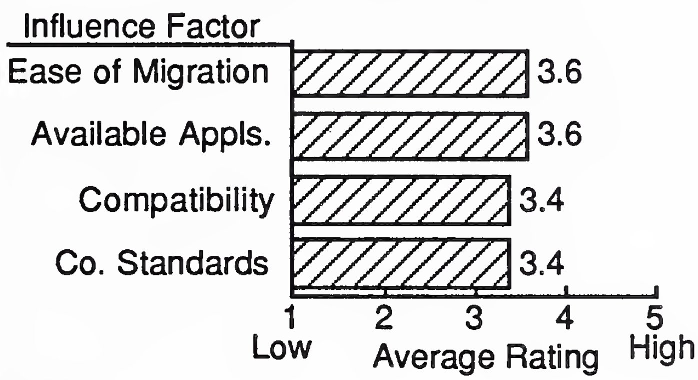
Rating of Factors Influencing DBMS Selection



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Conclusions on DBMS

- Oracle is well positioned on both C and S
- Microsoft gaining ground fast
  - FoxPro on both C and S
  - Access on clients

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MC3-PAC-15a

Notes:

Conclusions on DBMS

- Data base systems may be increasingly unnecessary on clients
  - 'Run-time' versions with data
  - No need for data management
- Variety of data base combinations exploding

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Vendor Strategies

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MC3-PAC-16

Vendor Strategies Systems Companies

- Establishing C/S units
  - IBM
  - Data General
  - Tandem
  - Amdahl
- Generally attacking market
  - DEC

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Notes:

Vendor Strategies Systems Companies

- "Cosmetic" approach in many cases
- Attempting to 'co-opt' the market
- Supported by consultants/IS managers

MC3-PAC-17b

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Vendor Strategies—Software Products Companies

- Running scared/hard
- High-end products
  - Downsizing products
  - Choosing ADEs difficult
  - Dramatically reduced pricing
  - Costly process

MC3-PAC-18a

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Vendor Strategies—Software Products Companies

- Low-end products
  - Adding features/functions
  - Potential for network distribution
  - Slowing client growth
  - Server pricing difficult

MC3-PAC-18b

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Notes:

Vendor Strategies
Services Companies

- Integrators leveraging knowledge
  - Andersen, CSC, Systemhouse, TRW
- Professional services companies switching skills
  - CGS, CTG, IMI

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Vendor Strategies

- Developing software for multiple platforms
- Acquiring/developing C/S skills
- Establishing technology centers
- Struggling with marketing/sales
- Stepping across boundaries

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Conclusions

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MC3-PAC-21

Notes:

Conclusions

- Data supports:
  - Movement to users
  - Fragmentation
  - Movement away from "standards"
  - Movement towards interoperability

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Conclusions

- C/S accelerates impact of price performance improvements
- Network products/services prime opportunities
- Internet is the network model of the future
- Small ("piggyback") networks will multiply

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Successful Products and Services—Marketing

- Win "beauty contests"
- Influence the influencers
- Price properly

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Client/Server Strategy

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Notes:

Tandem

Client/Server Strategy

- Fault tolerance and high availability for client/server (Himalaya Range)
- "Instant Information Everywhere"
- Client/Server as a customer service/customer delivery tool
- Shift away from proprietary systems

MC3-DR-1

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Tandem

INPUT Analysis

- Fierce market ⟶ forced layoffs, hurt profits (Q3,'93)
- Himalaya Range must succeed
- UNIX-based OLTP focus for client/server strategically wise

MC3-DR-2

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GUPTA

Client/Server Strategy

- Develop/market easy-to-use, scalable, open software
- Build on success in comprehensive PC-based systems
- Enhance compatibility through alliance programs (ISV, NCP)

MC3-DR-3 INPUT

Notes:

GUPTA

INPUT Analysis

- Good products, smart market focus, successful results
- Support and marketing need improvement
- Comprehensive vision faces competition (Powersoft, KnowledgeWare)

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Andersen

Client/Server Strategy

- Business Integration (BI) philosophy
- Strategic partnering (BIP program)
- Comprehensive software/service provisions

MC3-DR-5 INPUT

Andersen

INPUT Analysis

- Powerful, dynamic tools (Foundation)
- Business Integration=intelligent, successful strategy
- Well positioned, focused for client/server

MC3-DR-6

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Notes:

EDS

Client/Server Strategy

- Match technology to customer business needs
- Help customers define/implement client/server solutions (Right Step Program)
- Explore/develop new client/server technology

MC3-DR-7

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EDS

INPUT Analysis

- Multi-platform, multi-application expertise
- Deep understanding of business/industry needs
- Substantial experience and resources

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OpenVision

Client/Server Strategy

- Offer all-encompassing client/server system (OpenV*OPSS)
- "Customer-centric" service
- Strategic acquisition/alliance practices

MC3-DR-9 INPUT

Notes:

OpenVision

INPUT Analysis

- Young company, old experience (Mike Fields, Oracle)
- OpenV*OPSS not a "make-or-break" product
- Successful integration/ development of acquired products

MC3-DR-10 INPUT

Microsoft

Client/Server Strategy

- Windows=fundamental client/server structure
- Develop and market for low- through high-end users
- Continuous development, end-user focus (Hermes, Cairo)

MC3-DR-11 INPUT

Microsoft

INPUT Analysis

- Position=top end-user GUI vendor
- NT is ambitious, but not proven
- NT, HERMES focus of extreme competition

MC3-DR-12 INPUT

Notes:

Digital

Client Server Strategy

- Integrate technology, expertise, and industry focus
- New, comprehensive client/server services and business practices
- October 12, 1993—Over 170 new, C/S-focused products (Largest product announcement in Digital's history)

MC3-DR-13 INPUT

Digital

INPUT Analysis

- Acting on the need to change
- Positioned to provide client/server to installed base, and new customers
- Intriguing, strategic product direction

MC3-DR-14 INPUT

Intersolv

Client/Server Strategy

- Open applications development, regardless of platform mixture
- "Mix and match" hardware, networks, and software development
- Fast, cost-effective development to give customers competitive advantages

MC3-DR-15 INPUT

Notes:

Intersolv

INPUT Analysis

- Competitive player in applications development market
- Strategic alliances (ex. Powersoft, Digitalk) bolstering market presence, installed base
- Modular product strategy—avoiding problems of being "all encompassing" solutions vendor

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Powersoft

Client/Server Strategy

- LAN-focused applications development
- Client/Server Open Development Environment (CODE) partner program of alliances
- "Object Easy, SQL Smart, Windows Rich, MIS Friendly" product design

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Powersoft

INPUT Analysis

- One product company—risky position
- Strong competition—Gupta, KnowledgeWare, Microsoft
- PowerBuilder successful, but still evolving
- CODE program serving well

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- **Software and Services Market Forecasts**
- **Software and Services Vendors**
- **U.S. Federal Government**
  - Procurement Plans (PAR)
  - Forecasts
  - Awards (FAIT)
- **Commercial Application LEADS**

Custom Projects

For Vendors—analyze:

- **Market strategies**
- **Product/service opportunities**
- **Customer satisfaction levels**
- **Competitive position**
- **Acquisition targets**

For Buyers—evaluate:

- **Specific vendors**
- **Outsourcing options**
- **Market opportunities**
- **Systems plans**
- **Peer position**

Other Services

Presentations to user groups, planning meetings, etc.

Acquisition/partnership searches

Newsletters

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